

Claims

We claim:

1. An intubation imaging stylet for intubating a patient by use in a tube/imaging stylet combination, said imaging stylet comprising:

a malleable stylet having a longitudinal axis and a proximal end and a distal end;

a flexible image guide having a longitudinal axis and a proximal end and a distal end, said image guide being connected to said stylet such that a portion of said image guide runs parallel to a portion of said stylet along the longitudinal axis of said stylet and such that the distal end of said image guide is co-extensive with the distal end of said stylet; and

at least one flexible illumination fiber having a proximal end and a distal end, said illumination fiber being connected to said stylet such that a portion of said illumination fiber runs parallel to a portion of said stylet along the longitudinal axis of said stylet and such that the distal end of said illumination fiber is co-extensive with the distal end of said stylet, such that in use, said imaging stylet is disposed within a tube for intubating a patient thereby forming an imaging stylet/tube combination which in use is held by gripping the tube in a pen-like fashion.

2. An imaging stylet according to claim 1, further comprising a removable sheath having a longitudinal axis and at least one open end, said sheath disposed around the distal ends of said stylet, said image guide, and said illumination fiber such that the longitudinal axis of said sheath substantially coincides with or is parallel with the longitudinal axis of said stylet, wherein said sheath is adapted to isolate the distal end of said image guide from the inside of a body, and wherein said sheath comprises a transparent end portion at its distal end through which an image from the inside of a body can be received by the distal end of said image guide.

3. An intubation imaging stylet according to claim 1, further comprising means for viewing an image, said viewing means being connected to the proximal end of said image guide.

4. The intubation imaging stylet of claim 1, wherein said image guide is plastic.

5. An intubation imaging stylet according to claim 4, further comprising means for viewing an image, said viewing means being connected to the proximal end of said image guide.

6. An intubation imaging stylet for intubating a patient by use in a tube/imaging stylet combination, said imaging stylet comprising:

a malleable stylet having a longitudinal axis and a proximal end and a distal end;

a flexible image guide having a longitudinal axis and a proximal end and a distal end, said image guide being connected to said stylet such that a portion of said image guide runs parallel to a portion of said stylet along the longitudinal axis of said stylet and such that the distal end of said image guide is co-extensive with the distal end of said stylet; and

at least one flexible illumination fiber having a proximal end and a distal end, said illumination fiber being connected to said stylet such that a portion of said illumination fiber runs parallel to a portion of said stylet along the longitudinal axis of said stylet and such that the distal end of said illumination fiber is co-extensive with the distal end of said stylet;

such that in use, said imaging stylet is disposed within a tube for intubating a patient thereby forming an imaging stylet/tube combination such that the center of balance of the imaging stylet/tube combination is essentially the same location as the center of balance of a conventional stylet/tube combination.

7. An imaging stylet according to claim 6, further comprising a removable sheath having a longitudinal axis and at least one open end, said sheath disposed around the distal ends of said stylet, said image guide, and said illumination fiber such that the longitudinal

axis of said sheath substantially coincides with or is parallel with the longitudinal axis of said stylet, wherein said sheath is adapted to isolate the distal end of said image guide from the inside of a body, and wherein said sheath comprises a transparent end portion at its distal end through which an image from the inside of a body can be received by the distal end of said image guide.

8. An intubation imaging stylet according to claim 6, further comprising means for viewing an image, said viewing means being connected to the proximal end of said image guide.

9. The intubation imaging stylet of claim 6, wherein said image guide is plastic.

10. An intubation imaging stylet according to claim 9, further comprising means for viewing an image, said viewing means being connected to the proximal end of said image guide.

11. An intubation imaging stylet comprising: a malleable stylet having a longitudinal axis and a proximal end and a distal end; and a flexible image guide having a longitudinal axis and a proximal end and a distal end; said malleable stylet and said image guide being disengagably connected to each other along at least most of their length, such that their longitudinal axes are substantially parallel to each other, thereby forming an intubation imaging stylet having a center of balance located in the approximately center 1/3 portion along the longitudinal axis between said proximal ends and said distal ends of said malleable stylet and said image guide.

12. The imaging stylet according to claim 11, wherein said malleable stylet is disposed within a sheath, said sheath having formed therein a channel extending longitudinally substantially parallel to said stylet, and into which, in use, said flexible image guide is disposed, thereby being disengagably connected to said stylet.

13. The intubation imaging stylet of claim 12, wherein in a transverse cross-sectional view said channel is U-shaped.

14. The intubation imaging stylet of claim 12, wherein in a transverse cross-sectional view said channel is C-shaped.

15. The intubation imaging stylet of claim 11, wherein said image guide is indexed to said stylet.

16. The intubation imaging stylet according to claim 12, wherein said image guide is indexed to said stylet.

17. The intubation imaging stylet according to claim 11, wherein said image guide is contained within a scope, said scope comprising at least one flexible illumination fiber having a proximal end and a distal end, said fiber running substantially coextensive with the length of said image guide, and said scope further comprising a channel running substantially parallel to the longitudinal axis of said image guide such that when the intubation imaging stylet is in use, said malleable stylet is disengagably disposed within said channel, and the center of balance of the intubation imaging stylet is located in the approximately center 1/3 of said imaging stylet.